EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION

C-130H2, T/N 86-0412
BAGHDAD, IRAQ
27 JUNE 2008

On 27 June 2008, at 1235 local time, a C-130H2 aircraft, tail number (T/N) 86-0412, took off from Baghdad International Airport (BIAP), Baghdad, Iraq, to execute an operational wartime mission in support of United States and Coalition Forces' interests. The mishap aircraft (MA) was assigned to the 746th Expeditionary Airlift Squadron, 379th Air Expeditionary Wing, Al Udeid Air Base, Qatar.

Sixty seconds after the aircraft began its takeoff roll, at approximately 313 feet above the ground and 163 knots indicated airspeed, the MA's defensive system activated. The mishap pilot (MP) reacted in accordance with applicable directives. After reacting to the defensive alert the crew realized that RPM on engine numbers 1, 3, and 4 had decayed to 60% where it remained for the rest of the flight. After initial analysis, the mishap crew (MC) initiated the multiple engine power loss/RPM rollback checklist to regain power on the stalled engines. Due to the MA's low altitude and airspeed at the time of the defensive alert/reaction and the unexpected three engine power loss the MC was unable to complete the checklist and recover the malfunctioning engines. The MC initiated landing gear and flap extension but landed, partially gear down, in a field 3.98 nautical miles north of BIAP.

All 38 occupants safely exited the aircraft with only minor injuries. The MC consisted of a pilot, copilot, navigator, flight engineer, and two loadmasters. The MA caused minimal damage to the field where it landed and the government of Iraq stated no damage claims would be filed. The MA was a total loss, estimated at $39,899,645.17.

The Board President could not find clear and convincing evidence to determine the exact cause of the engine power loss. He did find evidence to conclude that several factors combined to significantly contribute to the MA landing partially gear down. Specifically, a defensive system alert, the aircraft's low altitude and airspeed at the time of the malfunction, and the decision to respond to the alert at low altitude and airspeed combined to result in the MA landing partially gear down.

All MA systems and performance were normal prior to the defensive system alert. An undetermined malfunction occurred during the defensive reaction that caused three of the MA's four engines to stabilize at an RPM (60%) which was not sufficient to maintain flight and the low altitude and airspeed at the time of the malfunction limited the time available for situation analysis and recovery. The MC had never been exposed to a loss of three or four engines on takeoff in the C-130H2 simulator which resulted in an emergency situation the MC had not seen before at a low altitude and airspeed. Checklist actions taken by the MC did not recover the engines and the MP appropriately performed a limited power, controlled descent, and forced landing resulting in only minor injuries.